

MASSACHUSETTS

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AGRICULTURE.

USES OF SALT IN AGRICULTURE.

We have several times invited the attention of our
readers to the article of salt, to be mixed with manure,
to be spread broadcast, or to be applied to
corn or potatoes. It is now time to be
talking of salt to be prepared for summer
use, in regard to potatoes against worms, and
in regard to corn.

From numerous statements made by farmers from
different quarters, it seems that salt is useful to pro-
tect potatoes against the fungus that appears on the
leaves, and probably causes the disease that has been
much talked of. If this is true we ought not to
wait one day to provide salt to be used on the
land in some mode or other.

Large quantities of salt may be mixed with ashes and
plaster and put on to corn or potatoes soon after they
are put in. Plaster is good, ashes are good, and it is
good also to attract moisture, the want of which
is detrimental to potatoes, than to any crop.

It is very salt in various ways that we may be able
to catch each other where it succeeds best.

PROSPECT FOR FRUIT.

There is a very full blossom on apple trees, and
it should anticipate much fruit were it not so early.
It is generally from the latter part of the season
that the apple trees on the highest ground have set.

It is often said that the apple trees on the highest ground have set
early, and that the fruit will be small and of poor
quality. This is a common saying, and is often
repeated. It is, however, a very uncertain
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CORRESPONDENCE.

THE GIRDLER.

As it is called by my good neighbor, Mr.
Isaac Hersey, is one of the meanest, most insid-
ious, and fatal of all the enemies of the apple
tree, which I hold, is the most valuable of all
fruit-trees in our land. I call him the *meanest*
and most insidious of enemies, because as in the
case of the whisperer or backbiter, it is extremely
difficult to track and find him, and when found
it seems incredible that so insignificant a creature
should have so much power. The caterpillar is
quite an honorable enemy. He waves his high
shining banner, and at a given time of day you
may know where to find him with all his host,
and there will be no strollers to trouble you af-
terwards.

This girdler is found between the bark and the
sap, or bedded in the sap, commonly of the size
of a small maggot and of a dirty white, as if
never washed. Instead of skipping like the
maggot he crawls slowly. Sometimes he is
found in the trunk of the tree, but more fre-
quently on the upper side of the limbs. Where he
works, the bark of the tree will appear discol-
ored and rough as if it had been roasted by the
fire. The caterpillar or outer skin will be loose
and the bark and sap will frequently exhibit an
appearance like powder post. Mr. Hersey says
he sometimes finds him in large numbers col-
lected. I have no doubt that this vermin has
been at work on some of my apple trees more
than twenty years. I have dug around them,
washed them with a solution of potash, or with
ashes and clay, destroyed the borers and enter-
pillars, and have hardly kept the trees alive.
Their roots have been feeble, they have become
misshapen as if they had a disease of the spine,
have yielded but little fruit, and have been com-
monly the ground.

Mr. Hersey tells me that the girdler was known
to his brother, Mr. Reuben Hersey, Jr., now
deceased, who cultivated a nursery. It would
have been of great value to the cultivators of
fruit, could they have had, in his time, the
benefit of his knowledge of this single enemy.
If I had possessed it twenty years ago, it would,
I have no doubt, have been worth five times that
number of dollars to me, and added not a very little
to the gratification and health of some of "the
loves of good fruit."

Mr. Hersey says he knows no other way to
destroy or check the girdler, but by cutting away
the dead bark and wood, and killing him on the
spot. Evidently no warning or reproach can reform those
who never hear them. The trees infested by this
enemy are near other trees which are thrifty
and uninjured.

The girdler may be known to others by some
other name. I wish some of your many intelli-
gent correspondents may direct the community
to the benefit of their information about them.
The benefit I have received from others, seems to forbid
me to withhold even the very little I may have
power to contribute. Accompanying this I send
you a piece of the limb of a tree from which I
destroyed a number of the girdlers, and which
exhibits his operations.

Yours truly,
J. RICHARDSON.
Hingham, May 6, 1846.

Mr. Richardson, we have received from the Hon. Mr.
Richardson a couple of pieces of apple tree limbs
nearly two inches in diameter, with a very rough
bark, appearing as many old limbs do on our trees
that have but little attention paid to them. A casual
observer would not suspect that any girdlers or other
worms were concealed under the bark. Many people
would be ready to declare the limbs to be sound.

We have been much interested to read your
article of the doctrine that trees, like animals,
are subjects of disease. The blight in pear trees
has been called a disease, a fire blight &c. The loss
of leaves of the bottom wood is attributed to a dis-
ease of the tree. The peach tree too is diseased, as
many say, when the leaves turn yellow. And
quince bushes are diseased when the extremities
of their limbs die.

But as all these appearances may arise from the
attacks of insidious girdlers or insects; and as leaves
will turn yellow and limbs will perish when they are
girdled, either openly or in secret, it is not more ra-
tional, more philosophical, to suppose that vegeta-
tion is destroyed by such means rather than by in-
ternal diseases?

More than twenty years ago, pear trees were at-
tacked in numerous orchards and the limbs suddenly
died. This was called "fire blight" as no worms or
girdlers appeared to do the mischief. But it was then
discovered by some of our best botanists that
small worms, or girdlers underneath the bark, were
the cause of this disease. And it is not long since
one of our correspondents sent us an apple tree limb
that had a worm in each eye, the number of a
dorm; these were then thought to be identical with
the worm that was found under the bark of the pear
tree.

When we were last in Smithfield, R. I., a gentle-
man showed us his beautiful quince tree, and he
also showed what had been made of the limbs
by a little girdler under the bark. His remedy was
amputation of the limbs as soon as the leaves wilted,
and burning them at once.

It is now known that bottom wood trees harbor a
variety of gnaws and insects. Is it not possible that
some may yet be discovered? Very small worms
may kill the largest oak; worms that cannot be seen
with the naked eye may do as much mischief as
any. The lice of Egypt were as annoying as the
frogs and snakes.

The limbs now sent us appear like thousands of
apple tree limbs that have ceased to grow—that have
come to a stand—the owners not suspecting any
secret foe. They are mossy and covered with a
dark thrush-like bark. Scrapping them and washing
with potash water would tend to annoy the worms;
but good cultivation around the tree is the grand
recipe to prevent this mossy appearance, and to
enable it to outgrow such infestations.

Such gnawing would find no ready entrance into a
smooth and thrifty bark, such a bark may always
be had where proper attention is paid. As young
cattle outgrow the vermin on them by good keeping,
young trees would flourish with proper attention
and not come to a stand on the loss of a few leaves
or limbs. Nature has provided an excess of limbs
and of leaves for the very purpose of permitting trees
to spare a part, but cultivation is essential to enable
trees to perform their proper duties.

We should like to hear from others whether they
have ever detected small dirty-white worms gird-
ling the limbs of their trees. (Editor.)

SHINGLING OR CLAPBOARDING THE SIDES OF BARN.

Mr. Editor, I noticed a few weeks since,
some remarks in your paper on the subject of
shingling the sides and ends of barns. This has
recently been done by some of my neighbors,
and as I am young and shall be obliged to reason
more from observation and the remarks that I
have gained from others, than from my own
experience, yet I beg to submit a few remarks
on this subject. Probably most people shingle their
barns for the preservation of their hay, if so, they
lose the labor and expense of

OUR FAVORITE "BOS."



This is not an exact likeness of a cow that we have in our pasture, but it resembles her. Our living
animal is now ten years old. She took the first premium at the cattle show last October at Concord. She
brought a heifer calf last year, which we are raising; this year she has a bull calf, and we mean to raise him
too.

We intend to make another trial as to the weight of butter that she will make in a week; we have more
feed than we had last year, and may possibly have more butter—but fifteen pounds will do pretty well for
a middle size cow.

Now let us not be misunderstood—we don't call this the best cow that ever was, but she is the best that
we ever had. We have no doubt there may be better cows in our own country, and we wish to brag them
out. We are still proud of a cow that will make fifteen pounds a week, though others may make eight-
een. Let us hear of all the very good cows in our country, and compare them with the crack bloods of
Europe.

So doing, for it is a fact that hay will not keep
so well in a barn made almost perfectly air-
tight, as in one that is not shingled on the sides
and ends and where the cracks are wide enough
to admit the air.

I recently had some conversation with an old
and experienced farmer on this subject, his
statement was as follows: I shingled one end of
my barn one year ago; this said he, I did for
the comfort of my cattle, and not for the preser-
vation of my hay. But in spending my hay this
spring, I noticed quite a difference, it all being
put in in good order last season. In that part of
my barn that was not shingled the hay came out
bright and free from dust and smoke, whereas
the hay in that part that was made almost per-
fectly tight, was dusty and smoky, and appeared
as though it had been subjected to dampness and
no air.

I would not make these remarks for the en-
couragement of those slovenly farmers who let
their barns remain out of repair. I would recom-
mend to every farmer to keep the roof of his barn well
shingled and tight, and the sides and ends well
boarded, and this is a good thing. But when I see a
man shingling the sides and ends of his barn,
making it almost perfectly air-tight, and doing
this for the preservation of his hay, I do not
hesitate to pronounce that man more wise than
wise. Yours respectfully, G. W.
Georgetown, May 4, 1846.

Farmers often complain that they can-
not afford this and that convenience in their barns
and dwellings—they have no money to spare for or-
naments, &c., yet they will be extravagant at times,
and spend money most absurdly to gratify a whim,
to the detriment of their real interests. Clapboard-
ing the sides of barns to keep the hay warm and
the dwelling house cold and needs whitewashing
and painting, would be absurd enough even if the
barn were made better by such an outlay; but when
great expense is incurred to make a barn warm,
while necessary repairs are postponed for want of
means, we consider such management as cutting a
farmer to a suit among the mono-manics.

It will cost you four times as much to board and
clapboard your barn as it will to build it only. And
it will cost you twice as much to joint your boards
and match them, without clapboarding, as it will
to nail on your square-edged boards with such an edge
as the mill makes; and when you have done this
you will find your rough boarding far superior to your
jointed work. The air is admitted but the snow
drifts are excluded; the nap on the edge of the
board enables you to make a better joint than you
can after using a plane to make the edge smooth.

If you wish to put boards on as close as possible,
you can use an iron bar to make joints. By using
good boards from the mill any farmer can
board his own barn and make it as tight as it will
be made without injuring the hay. Cattle
may be kept warm on the south side of the hay mow,
or in the barn cellar, which will be warmer than
clapboarding in Christendom.

Rough boards may be whitewashed better than
planned ones; and as there are but few people who
feel able to keep their dwelling houses painted regu-
larly, it is hardly worth while to paint barns. Whit-
ewashing appears well when it is followed up and re-
peated annually.

We have known numerous instances of spoiled
hay in consequence of tight boarding. It is quite im-
portant to a farmer to put his hay under cover as
soon as he possibly can; and he may often cart in
his hay one day sooner when he has a proper barn
and room enough, than when he is obliged to com-
press his mows to the utmost, in a tight barn. When
he has room enough he need not trouble himself to
hire a man to tread down his hay mow; it will sink
fast enough of itself. (Editor.)

TRIMMING OLD FRUIT TREES.

Mr. Editor, I have been very much inter-
ested in reading the reports in the Ploughman
of the different meetings at the State House
during the session of the Legislature of your
farmers, &c. Much good, I apprehend, will re-
sult from these discussions. They will set far-
mers to observing, thinking and experimenting,
the correct way of arriving at facts—and facts
are what the farmer wants.

I perceive, however, that in regard to a great
many every day operations of the farmer, hardly
two of you could agree, respecting the best
method of performing them.

I have taken my pen, however, not for the
purpose of criticising those discussions—I have
not the qualifications for that—but for the pur-
pose of saying a word or two respecting some
fruit trees of mine—and you will perceive that
my experience is directly counter to that of some
of your "knowing ones." Well then—after
the death of Dr. Daniel Stone some three or four
years ago I took his place in this town as a
Physician and Surgeon—and shortly after, purchased
an acre of land, not far from his estate and built
thereon a house, stable, &c. On the land was
quite a number of old fruit trees that had been,
from their appearance, once the pride of their
owner. I had a mind that they were more fitted
for the fire than for fruit, and was about cutting
them down, and already one was a wood pile. I
then altered my mind and concluded to "dig
about it," &c., and watch the effect. Accord-
ingly, I ploughed up the ground, pruned the
trees thoroughly, so that there should not be one
limb to interfere with another, and took a spoke-
shave and shaved off all the old bark until the
white appeared, extending this process to the
larger limbs. This I did early in the spring.

The result was as gratifying as it was astonish-
ing. One of the trees I had grafted—and off of
the other three subjected to the above treatment
—the same season I got five barrels of apples,
thirty-two of which I took from one tree weighed
fifteen pounds. The trees are resetting, and of
a kind that at this season of the year good ex-
perience, that rather inclined to be meanly and dry,
I have kept these trees thoroughly cropped and

THE SEASONS.

In fair Spring's fresh budding hours
What adorns our garden-dowers?
Little flowers.

When departing Spring we mourn,
What adorns our garden-dowers?
Hay and corn.

What is Autumn's bounteous sign,
Mark of Providence divine?
Fruit and wine.

When cold Winter, hobbling slow,
Comes, what do we gain, d'ye know?
Ice and snow.

The following article is from the pen of Mr.
Sanford Howard who published it in the Albany
Cultivator, from which we copy it.

WINTER FOOD FOR STOCK.

To enable herbivorous animals to assimilate their food,
it is necessary that the nutriment should be dis-
seminated through sufficient bulk to give direction
to the bowels during the process of digestion. In
addition to bulky, ruminating animals require also
food of a fibrous nature to enable them to chew the
food—a function which experience proves is essential
to health.

Green herbage is undoubtedly the food best adapted
to the natural wants of these animals. It has been
remarked by a sensible writer on this subject,
Mr. W. C. Spooner, that good green is the only kind
of food in which nutriment, bulk, and succulence
are combined in the proportions exactly suited to
their habits. But in many situations where the
wants of nature are not supplied, and in most
nutritive grains, and from clover, is first to be chosen.
But even with the best of hay, something
more is required to form the animal a perfectly
sound and healthy creature, and in most
fodder there is a deficiency of nutriment.

It is, of course, an object for the farmer to grow
such crops as will furnish food for his stock at the
least expense; but as circumstances in regard to soil,
climate, &c., vary much, no rule of universal appli-
cation can be laid down. The cereal grains, of which
the large proportion of nutriment which they con-
tain, will always be profitably cultivated and
used to a greater or less extent. And so far as the
production of food for stock is concerned, Indian corn
will take the first rank among grain-crops, in all sit-
uations adapted to its culture.

The deficiency of nutriment in any kind of dry
fodder, may be supplied by adding to the animal's
chow, a few pounds of some kind of green food, such
as turnips, or the like. The animal will not eat the
fodder, but will eat the green food, and thus obtain
the nutriment which is so deficient in the dry
fodder. It is, of course, an object for the farmer to grow
such crops as will furnish food for his stock at the
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In this country, potatoes, turnips, carrots, beets,
&c. are some cultivated, either for fattening animals,
or as auxiliaries to dry food in wintering stock. The
question is often asked, whether these articles can be
profitably grown by the farmer? and as before
suggested, the answer must depend on several
circumstances. The writer has had some experience
in cultivating and using all these vegetables,
and a few of the conclusions induced by this experi-
ence will be briefly stated.

1. On cold and rough soils, or those of only medi-
um fertility, the potato is to be preferred.
2. On warm, rich soils, the carrot is most profit-
able.
3. Between beets and turnips, the latter should be
chosen, as they are more nutritious, and a more warm
and arid climate.

According to the estimates made by Thier, Veit,
and others, (and which may be observed as sup-
porting the writer's experience,) the comparative
value of these vegetables, in relation to the quantity
of potatoes are equivalent in feeding animals to three
bushels of beets, or to three of rutabaga, four of
beets, or turnips, and five of rutabaga, or carrots.
allowing the same weight per bushel for each.
Some estimate the carrot equal to the potato, weight
for weight.

On rough and thin soils, potatoes can be cultivated
with much less loss than either of the other veg-
etables named, and there are but few situations
where a yield of at least two hundred bushels per
acre may not be obtained. This would be equal to
four hundred bushels of beets or rutabaga, or four
hundred of white turnips; and yet we have seen
we have raised from two to three hundred bushels
of potatoes per acre, in situations where neither beets,
rutabaga, nor carrots would have given a greater yield,
though the cost of cultivation would have been con-
siderably more.

But on soils exactly adapted to carrots, a yield can
be obtained so much greater than is afforded by po-
tatoes, as to throw the balance decidedly in favor of
the former.

Carrots may be sown from the 10th of April to the
1st of June, though on light and dry soils, they
should prefer sowing them as early as the ground is
found to have acquired a sufficient degree of heat to
enable them to vegetate. Best results are obtained
from the first to the 20th of May—rutabaga from
the 20th of May to 10th June—and flat or common
white turnips, from the 20th of May to 10th June.
The chief advantage of raising the latter for stock,
consists in the lateness of the season at which it ad-
mits of being sown—frequently occupying land
which a crop of hay or rye may have been taken
up, and which, if sown with carrots, would be lost
and sheep the fore part of winter, though their
real value is thought to be fifty per cent. less than
potatoes.

Carrots, beets, and turnips are sown to best ad-
vantage with machine. A good machine will do the
work better than it can be done by hand, and with
a great saving of labor. After the ground is
well prepared, a man, will sow or plant from an
inch to two inches deep, and then draw the rows
between the rows. Carrots will bear thick plant-
ing. Mr. RILEY, of Chataqua county, a success-
ful competitor for the premiums on stock, offered
by the N. Y. State Agr. Society, makes his rows
about ten inches apart. If, however, it is desired
to use the horse-hoe or cultivator in managing the
crop, a greater distance must be given, say forty
to twenty-two inches. Where the use of imple-
ments drawn by a horse are resorted to, it is obvious
that more space must be allowed between the rows
than the carrots require; but this objection may be
in a good degree counteracted by sowing two rows
as near together as will just allow the working of
a hoe between them, leaving the alternate spaces
sufficiently wide to admit the horse-hoe or cultivator.
The plants should stand in the row at about the dis-
tance of three inches. The white Belgian carrot is
most easily grown, but is thought to be less nutritive
than the yellow varieties.

Beets and rutabaga should be sown in rows, at
the distance of two feet, and thinned to a foot apart
in the row. After having been once over with the
hoe once or twice and carefully thinned, the cultiva-
tor will do the work, if proper care be taken. The
plants should stand in the row at about the dis-
tance of three inches. The white Belgian carrot is
most easily grown, but is thought to be less nutritive
than the yellow varieties.

The best protection against the fly which we have
ever tried, is a sprinkling of plaster, and
sifted lime or ashes, while the plants are wet with
dew, so that the dust will adhere to them and form a
crust.

A very aged man, busied in planting apple
trees was lately asked, "Why do you plant trees,
you cannot hope to live to the fruit of them?"
He raised himself up, and leaning on his spade,
replied, "Some one planted trees for me before
I was born, and I have eaten the fruit; I now
plant for others, that the memorial of my grati-
tude may exist when I am dead and gone."

PREMATURE BURIAL.

The custom of premature burial in some coun-
tries—in France and even in America, which
continues in a great extent in the one country,
though in a lesser degree in the other, and in
opposition to the overwhelming arguments
against it—is only protected from the severest
sanctions by the horror of the subject, and by
the recollection of the many stupid errors that
still so obstinately cling to our social customs.
A recent number of the Albion has some re-
marks on this subject, in which it is said that
the number of living interments which have been
troubled by accidents during the year 1839, is
ninety-four. Ninety-four attested cases in
which the living have only by accident escaped from
the indescribable horrors of a living grave!

In the eye of common sense, each case not so
escaped, is a murder, for the plea of non-inten-
tion cannot be allowed to a law that risks it
against such proofs as this. Of these ninety-four
persons, thirty-five recovered spontaneously
from their lethargy at the moment the funeral
services were commencing; thirteen were aroun-
ded under the influence of the burial, and the ex-
pressions of grief around them; seven by the
pricking of the flesh in sewing up the shroud;
five by the sense of suffocation in their coffins;
nineteen by accidental delays in the interment,
of how great moment to the victims though pro-
ceeding from trivial causes!—and six by volun-
tary prearrangement suggested by doubts of the
death. These, then, are they who have escap-
ed from the horrors of the living grave, and who
of trances and epilepsies, and remember that the
population of France from twenty-four to forty-
eight hours after death, before the grim Con-
queror in most cases has had time to hang his
conquering train. "Yet yet death's offering fingers
had swept the lines where beauty lingered"—and
then calculate if you can, the numbers whom no
intervening angel came, to save them from this
inconceivable horror! On that head the statistics
of course are silent, but suggestive! Of all the
cases, however, that have occurred, the great
majority, and from every source, is first to be chosen.
But even with the best of hay, something
more is required to form the animal a perfectly
sound and healthy creature, and in most
fodder there is a deficiency of nutriment.

It is, of course, an object for the farmer to grow
such crops as will furnish food for his stock at the
least expense; but as circumstances in regard to soil,
climate, &c., vary much, no rule of universal appli-
cation can be laid down. The cereal grains, of which
the large proportion of nutriment which they con-
tain, will always be profitably cultivated and
used to a greater or less extent. And so far as the
production of food for stock is concerned, Indian corn
will take the first rank among grain-crops, in all sit-
uations adapted to its culture.

The deficiency of nutriment in any kind of dry
fodder, may be supplied by adding to the animal's
chow, a few pounds of some kind of green food, such
as turnips, or the like. The animal will not eat the
fodder, but will eat the green food, and thus obtain
the nutriment which is so deficient in the dry
fodder. It is, of course, an object for the farmer to grow
such crops as will furnish food for his stock at the
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will take the first rank among grain-crops, in all sit-
uations adapted to its culture.

In this country, potatoes, turnips, carrots, beets,
&c. are some cultivated, either for fattening animals,
or as auxiliaries to dry food in wintering stock. The
question is often asked, whether these articles can be
profitably grown by the farmer? and as before
suggested, the answer must depend on several
circumstances. The writer has had some experience
in cultivating and using all these vegetables,
and a few of the conclusions induced by this experi-
ence will be briefly stated.

1. On cold and rough soils, or those of only medi-
um fertility, the potato is to be preferred.
2. On warm, rich soils, the carrot is most profit-
able.
3. Between beets and turnips, the latter should be
chosen, as they are more nutritious, and a more warm
and arid climate.

According to the estimates made by Thier, Veit,
and others, (and which may be observed as sup-
porting the writer's experience,) the comparative
value of these vegetables, in relation to the quantity
of potatoes are equivalent in feeding animals to three
bushels of beets, or to three of rutabaga, four of
beets, or turnips, and five of rutabaga, or carrots.
allowing the same weight per bushel for each.
Some estimate the carrot equal to the potato, weight
for weight.

On rough and thin soils, potatoes can be cultivated
with much less loss than either of the other veg-
etables named, and there are but few situations
where a yield of at least two hundred bushels per
acre may not be obtained. This would be equal to
four hundred bushels of beets or rutabaga, or four
hundred of white turnips; and yet we have seen
we have raised from two to three hundred bushels
of potatoes per acre, in situations where neither beets,
rutabaga, nor carrots would have given a greater yield,
though the cost of cultivation would have been con-
siderably more.

But on soils exactly adapted to carrots, a yield can
be obtained so much greater than is afforded by po-
tatoes, as to throw the balance decidedly in favor of
the former.

Carrots may be sown from the 10th of April to the
1st of June, though on light and dry soils, they
should prefer sowing them as early as the ground is
found to have acquired a sufficient degree of heat to
enable them to vegetate. Best results are obtained
from the first to the 20th of May—rutabaga from

